

Calderbank 19-6-42

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PATENT AND TRADEMARK OFFICE

## Patent Application

Inventor(s)	Arthur Robert Calderbank Ayman Naguib Nambirajan Seshadri	Case Name	Calderbank 19-6-42
Filing Date	4/28/1999	Serial No.	09/300,494
Examiner	Chieh M Fan	Group Art Unit	2634
Title	Combined Channel Coding and Space-Time Block Coding in a Multi-Antenna Arrangement		

ASSISTANT COMMISSIONER FOR PATENTS

WASHINGTON, D.C. 20231

SIR:

## AMENDMENT

In response to an Office action dated September 16, 2002 please amend the above-identified application as follows:

## IN THE SPECIFICATION:

Please replace the paragraph at line 2 of page 10 with the following: —

When  $\beta_1$  is set to 1, we get the following minimization criterion from equation (21)

## IN THE CLAIMS:

## 3. (Amended) A transmitter comprising:

a demultiplexer responsive to an applied input signal for developing a plurality of at least two signal streams, and

a like plurality of channel coding/space-time coding transmitters, each responsive to a different signal stream of said plurality of signal streams, and each carrying out channel coding followed by space-time coding.

## 4. (Amended) The transmitter of claim 3 where each of said channel coding/space-time coding transmitters comprises:

a channel coder of rate  $R_s$ ,

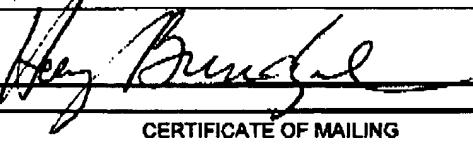
**LAW OFFICE OF  
HENRY T. BRENDZEL**

		<b>Date:</b> December 16, 2002
<b>To:</b>	Examiner: Chieh M Fan	<b>From:</b> Henry T. Brendzel, Esq
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<b>Re:</b>	Serial No: 09/300,494	<b>Pages:</b> Cover + 9

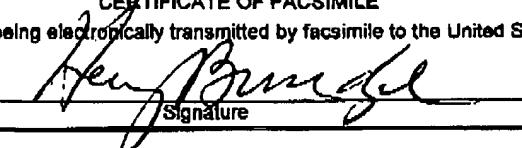
Henry Brendzel

<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing)		<i>Complete if Known</i>	
		Application Number	09/300,494
		Filing Date	4/28/1999
		First Named Inventor	Arthur Robert Calderbank
		Examiner Name	Chieh M Fan
		Group/Art Unit	2634
Total number of pages in this Submission: this page, plus		8	Attorney Docket ID
			Calderbank 19-6-42

<b>ENCLOSURES (check all that apply)</b>		
<input type="checkbox"/> Fee Form ( <input type="checkbox"/> Check included) <input checked="" type="checkbox"/> Fee Form not included, but should a fee be due, the Commissioner is Authorized to charge Deposit Account No 500732 of Henry T. Brendzel <input checked="" type="checkbox"/> Amendment/Response <ul style="list-style-type: none"> <li><input type="checkbox"/> After Final</li> </ul> <input type="checkbox"/> Affidavit(s)/Declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <ul style="list-style-type: none"> <li><input type="checkbox"/> Response to Missing Parts under 37 CFR 1.2 or 1.53</li> </ul> <input type="checkbox"/> Declaration (no Missing Parts Notice)	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition Routing Slip (TO/SB/69) and Accompanying Petition <input type="checkbox"/> To Convert a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation or Change of Correspondence Address <input type="checkbox"/> Express Abandonment <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> To Convert to Statutory Invention Registration	<input type="checkbox"/> Postcard(s) <input type="checkbox"/> Small Entity Statement <input type="checkbox"/> Request for a Refund <input type="checkbox"/> After Allowance Communication to group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communications to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other

<b>SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT</b>		
Firm or Individual Name	Henry T. Brendzel	
Signature		
	Date 12/16/02	

<b>CERTIFICATE OF MAILING</b>		
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<b>CERTIFICATE OF FACSIMILE</b>		
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Henry Brendzel Name of Person Signing		12/16/02 Date